

Trip Reports

JF36 Growling Swallet – Dreamtime Sump dive II

Stephen Fordyce

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Party: David Bardi, Stephen Fordyce (Diver), Alan Jackson, Andreas Klocker, Ken Murrey, Michael ‘Pax’ Packer, David Taberner, Sandy Varin.

Summary

Following the successful breaking through the restriction at the downstream end of Dreamtime Sump in December 2014 (Fordyce 2014), another attempt was made to explore further into the sump, and also to survey it properly. All things went more-or-less according to plan and ~350 m of line was added to the ~150 m laid previously. There was another significant airspace and then the sump plunged to a depth of 26 m before coming back up nearly (but not quite) to airspace at the turn point in a high rift passage barrelling onwards. All guideline in the Dreamtime Sump was successfully surveyed on the way out, with the resulting plot showing the sump heading for the Mt Niggly section of Niggly Cave and only 200 m away.

Disclaimer

This was a solo dive. There are plenty of other places to discuss the pros and cons of solo diving, but as part of the trip, the risks, equipment, plan and diver’s abilities were assessed and accepted by the team leaders, the team and of course, the diver.

Detail

I’ll spare the details of the trip to the sump – this was covered in much detail in my previous report on Growling (Fordyce 2014). Many of the same crew were along again, with Alan and Pax last minute additions (and welcome tank sherpas) although with a different mission: to check out some leads and do some surveying at Frownland, deeper into the cave. With an earlier start and making good time through the cave, we were a well-oiled machine moving at slightly more than one third optimum Alan Jackson speed.

The equipment for the dive was selected as follows:

- 2x 9 L carbon fibre tanks with 6 kg of weight strapped to each
- 1x 7 L steel tank – clipped “over the top” of the carbon fibre tank on my left
- Drysuit with 7 mm hood, Fourth Element “Arctic” undergarment plus polypro thermals, and a thick synthetic jumper
- 4.5 kg of weight on a weightbelt
- ~10 yellow silt pegs (all were used)
- Three reels with a total of ~500 m of line (there was no way I was going to run out again!)

The gas plan was to dive in breathing only the 7 L steel until it was basically empty, then dive out breathing only one of the carbon fibre tanks (unless it got too low to make an exit on if the full tank failed for some reason), coming out with two largely empty tanks, and one full tank which could be left in the cave for next time, while still maintaining enough reserve

gas to safely exit the cave in the event any piece of equipment failed. This plan was carried out successfully, however we reluctantly brought out the full tank anyway for reasons explained later.

My recorded gas pressures at various points were:

Point in the dive	7 L Steel	9 L C.F.	9 L C.F.
Start of dive	240 bar	240 bar	240 bar
End of sump 1 (“Dreamtime”)	200 bar	240 bar*	240 bar*
End of previous line	170 bar	240 bar*	240 bar*
End of sump 2 (“She Goes Tunnel”)	145 bar	240 bar*	240 bar*
Furthest point reached in sump 3 (“Niggly-Bound”)	15 bar	240 bar*	240 bar*
Return from sump 3 to “30 m Long Lake”	15 bar	110 bar	240 bar*
End of dive	15 bar	60 bar	230 bar**

*Extrapolated afterwards, checked at the time but not written down

** The slight change in this tank would be due to using it for wing/drysuit inflation

Narrative

Arriving at the sump, there was the usual dance of trying to get changed from filthy wet trogsuit into dry undersuit and drysuit, without getting too much mud on the zip (all this on a small mud/sandbank with about 1.4 m vertical space). With plenty of willing hands to make the process quicker, I was promptly geared up and stomach wriggling out into water deep enough to float in.

It wasn’t too much of a drama getting through the first long and flat restriction with the third tank, in fact having it unclipped was a pain and it was much easier leaving it clipped for the way back. I made good time and popped up into the small chamber at the end of sump 1, crawled across the couple of muddy metres and continued into sump 2. The line was pleasantly still in the same condition (excellent?!) that I left it and didn’t need much tidying up.

Vis seemed to be a slight improvement on last time at ~3-4 m, and pretty soon the reel was unspooling into new cave (after noting gas pressures), with the nice “She Goes Tunnel” 3 m wide and 1.5 m high at only 1.5 m water depth going straight ahead. The profile was square, with a flat silty floor and weak rock or mud chunks on the walls that preferred to fall off rather than be tied off to. Silt pegs were used occasionally, but the straight tunnel allowed a good long distance between them. At regular points there were shallow air pockets on the ceiling, one big enough to stick my head up into.

The tunnel constricted ahead and I wondered if it would be a terminal rock pile, as there were rounded rocks about 10-30 cm in diameter piled at the bottom of a slope in 3.5 m water depth. But no, although low and sloping up, I could happily fit through and after having some difficulty jamming a siltpeg in at the start of the slope, I followed the sloping restriction upwards. The gentle current had started to push some silt ahead of me, but I was relieved when the ceiling disappeared and I broke the surface into a nicely sized chamber. Actually, it was

really pretty big, being about 30 m long, 4 m high and 3 m wide!

As I came out of the water, I noticed the cave actually took a 90 degree turn to the right, in a high passage with a shallow lake and a beach. I took a moment to sunbathe, catch my breath and also make a solid couple of tie-offs and stick on an arrow pointing home. It was interesting to note the same little white cave shrimp in the water, similar to the ones at the start of the Dreamtime Sump. Checking my gas I still had heaps left for penetration, and if the cave kept on at this depth, it was going to be one seriously epic long dive and I would probably run out of line again!

But the cave had other ideas: after wading the 30 m long “30 m Long Lake” lake and sumping again, it dropped straight to 12 m. Ok, that was fine, I still had plenty of gas for that ... but over the next 200 m (and tying in the third reel!) the passage continued to slope down in regular steps (with low sections, but nothing too bad) before it bottomed out at 26 m. Getting towards turn pressure, at 25 m+ depth and with only 9 L tanks (also by this point a good hour away from the support crew) there were definitely some mind games going on. I reckon being on edge at times like these is a very useful survival mechanism!

Having a bit of penetration gas remaining, a conservative plan and an airspace not too far back, I pushed on ... and the cave came up! Up a series of steep slopes with some tight/flat bits, with a few balls of silt rolling down, until the cave turned into more of a rift passage in 5 m water depth. It was showing all the signs of surfacing again (into fabled gigantic master cave), and with not much penetration gas left I followed the ceiling, eventually reaching a tantalising 1 m water depth but with no cigar, and no surface either. The rift passage looked high as I couldn't see the bottom, and it didn't seem to be going all the way to airspace, although it was certainly going on ahead.

With turn pressure reached and my 7 L steel tank now basically empty I reluctantly wound in 10 m or so of line to find a final tie-off point, having long used all the silt pegs. With the reel clipped off and wet-notes out it felt good to be heading home, even though it was a cold long way which all had to be surveyed, which is what responsible explorers do.

This helped keep me focused and the gentle current made for a nice swim back in relatively good vis compared to most sump exits, due to the percolation of silt off the ceiling from exhaust bubbles. Turns out I'd added 350 m of new line that dive, and surveyed 500 m in that dive; a pretty good effort! Mind you, considering the 85 person-hours of in-cave time, perhaps this is debatable.

Epilogue

Everyone else was still there and cold and it took some considered faffing to get packed up and moving again. We had a quick council of war and decided to bring all the tanks out – this was sad, but it was felt that for the effort involved to go much further, the next push would need a different approach that probably wouldn't happen before winter. However, we left all the weights (no belts or rigging) tied to a protrusion on the wall, back from the sump in the larger passage. Hopefully they will survive the winter floods.

The trip out was ... like most trips out of caves. Enough said.

Alan plotted the survey data the next day and the sump has surprised us – rather than heading for upstream of Niggly (Porcupine leg) and projected master cave beyond the terminal (upstream) Niggly rock pile, it is heading for the eastern end of Mt Niggly chamber (and only 200 m away) right where there is a record of a stream entering through rock pile ... With key personnel unavailable, an attempt at making the connection is going to have to wait until next summer and plans of attack are under discussion: stay posted for the next instalment.

Thanks and Acknowledgements

The usual thanks go to Andreas for generally organising pretty much EVERYTHING, Alan for mapping and generally being a JF guru and everyone who carried gear or did setup trips. This sort of thing is not done so someone can have a fun dive – it's to carry out meaningful exploration and bring back data with purpose. I'm glad we as a team could achieve this.

Reference

FORDYCE, S. 2014 JF36 Growling Swallet, Dreamtime Sump dive. *Speleo Spiel* 405: 9-13

IB104 Giotto Pot

Janine McKinnon

19 July 2015

Party: Anna Ekdahl, Sarah Gilbert, Han-wei Lee, Janine McKinnon, Chris Sharples, Ric Tunney.

Ric and I had decided that a nice Sunday outing underground was in order. We planned for something laid-back, not too long, and not too strenuous, for a mid-winter stroll.

We advertised and got four other like-minded souls.

After due consideration, Giotto Pot was chosen. It is pretty much straight down (hence, a 'pot'), so not lots of grovelling required. It is just off Skinners Track, on the Pseudocheirus Cave track, so not a long walk. It only has four pitches, the last 6 m one not worth the bother, so not heaps of vertical work. Perfect.

I have been there before but couldn't find the trip report. Actually twice, I think – once with Madphil and once with Geoff Wise and others – but still couldn't find a trip report. Maybe we didn't write one. Not to worry. [Well, that took 30

seconds: with Madphil – SS336: 11-12; with Geoff Wise – I don't think it was published – Ed.]

We had no problems finding the cave and were ready to head in at 11 am. I went first. It was definitely familiar; particularly the crappy climb down at the entrance. Not the squeeze around the corner to the slope leading to the first pitch though. Another case of my brain excising the bit it didn't like.

The top of the 58 m pitch was slightly awkward to rig but not ridiculously so. After some discussion we chose the naturals to use. A couple of redirections were needed on the way down but it was pretty much a free hang for most of the drop.

Sarah followed me and we started working on the next obstacle - a short, 2 m, climb up with no hand-holds to use, and a TINY foot hold not in an ideal place. In the end I used her shoulder as a balance point and dragged myself (inelegantly) up. I rigged a tape, and rope, with hand-holds and foot loop for the others to use.

We were now on a ledge above the 13 m pitch. The others all arrived by the time we had this rigged. I headed down, and started rigging the next pitch as everyone else followed promptly. Sarah was next down and we discussed where to rig